## SEQUENCE LISTING

- <110> THERAPTOSIS S.A.
- <120> "Peptides having, for example, an antiangiogenic activity and
  application thereof in therapeutics"
- <130> CP/61114-PCT
- <150> FR 02 11 270
- <151> 2003-09-25
- <160> 30
- <170> Patentin version 3.1
- <21.0> 1
- <211> 26
- <212> PRT
- <213> Human HIV
- <220>
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- <222> (1)..(1)
- <223> either a G or a GG, the amino-terminal end of which is free, alkylated, acylated, in particular acetylated, or contains a labeling group such as the biotinyl group.
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- <222> (2)..(2)
- <223> either a C, in which case X in the 2-position = X in the 9 position, the two Cs then being connected by a disulfide bridge, or X in the 2-position is capable of forming a lactam bridge with X in the 4-position, one of X in the 2-position or X in the 9-position being an amino acid bearing an acid group, such as A or D, the other bearing an amino function, such as Q or N.
- <220>

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- <222> (2)..(2)
- <223> either a C, in which case X in the 2-position = X in the 9 position, the two Cs then being connected by a disulfide bridge, or X in the 2-position is capable of forming a lactam bridge with X in the 9-position, one of X in the 2-position of X in the 9-position being an amino acid bearing an acid group, such as A or D, the other bearing an amino function, such as Q or N.
- <220>
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- <222> (9)..(9)
- <223> either a C, in which case X in the 2-position = X in the 9 position, the two Cs then being connected by a disulfide bridge, or X in the 2-position is capable of forming a lactam bridge with X in the 4-position, one of X in the 2-position or X in the 9-position being an amino acid bearing an acid group, such as A or D, the other bearing an amino function, such as Q or N.
- <220>
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- <222> (17)..(17)
- <223> either an R motif or a K motif
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- <222> (21)..(21)
- <223> either an R motif or a K motif
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- <222> (24)..(24)
- <223> either an R motif or a K motif
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- <222> (26)..(26)
- <223> is an aliphatic amino acid, the C-terminal end of which is amidated.

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      (6)..(6)
<223> either an M motif or a norleucine motif
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<222> (10)..(10)
<223>
       either a motif, or a succession of two di-, tri- or tetrapeptide
       motifs composed of G or of a combination of G and of S, such as
       GG, GGG, GGGG, GGS, GGGS or GGSGGS, or else X in the 5-position.
       is a C motif, the side chain of which serves as a point for
       covalent bonding with a 3-nitro-2-pryidinesulfenyl group ...
<400> 1
Xaz Xaa Arg Gly Asp Xaa Phe Gly Xaa Xaa Leu Leu Phe Ile His Phe 1 15 10
Xaa Ile Gly Ser Xaa His Ser Xaa Ile Xaa
<210>
<21.1>
       28
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<221> Disulfide
<222> (3)..(10)
<223>
<400> 2
Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Phe Ile
1 10 15
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His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 25

<210> 3 <211> 28

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<213> Human HIV

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<222> (3)..(10)

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<400> 3

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Arg Ile 15  $^{\rm 10}$ 

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 20

<210> 4

<211> 27

<212> PRT

<213> Human HIV

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<221> Disulfide

<222> (3)..(10)

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<400> 4

Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 20

<210> 5

<211> 28

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<222> (3)..(10)

<223>

<400> \$

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Ser Leu Phe Ile 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 20

<210> 6

<211> 28

<212> PRT

<213> Human HIV

<220≻

<221> Disulfide

<222> (3)..(10)

<223>

<400> 6

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Phe Ile 1 10 15

His Phe Lys Ile Gly Ser Arg His Ser Arg Ile Gly 20

<210> 7

<211> 29

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<223> NR representing an N-alkylarginine motif
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His Phe Ash Arg Ile Gly Ser Arg His Ser Arg Ile Gly 20
<210> 8
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<222> (3)..(10)
<223>
<400> 8
Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Sar Arg 1 10 15 ^{\circ}
His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
<210> 9
<211> 28
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<222> (3)..(10)
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· <400> 9
  Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Ser Ile 1 \phantom{0} 15
  His Phe arg Ile Gly Ser Arg His Ser Arg Ile Gly 25
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          10
  <211>
           28
  <212>
          PRT
  <213>
         Human HIV
  <220>
  <221>
         Disulfide
          (3)..(9)
  <222>
  <223>
 <400> 10
 Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Phe Arg 1 \  \  \, 10 \  \  \, 15
 His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 20
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 <222> (1)..(1)
         the RGD motif via a lactam bridge between the amino acids X (X)-C-O-NH-(X'), X and X' being amino acids such that one bears an acid group and the other bears an amine
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<222> (8)..(8)
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<223> the RGD motif via a lactam bridge between the amino acids X (X)-C-O-NH-(X'), X and X' being amino acids such that one bears an acid group and the other bears an amine

<400> 11

Xaa Arg Gly Asp Met Phe Gly Xaa

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X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

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<222> (10)..(10)

<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 12

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Phe Ile 1 10 15 15

His Phe Arg Ile Gly Cys Arg His Ser Arg Ile Gly

<210> 13

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<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

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<222> (10) . (10)

<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 13

Gly Gly Xaa Arg Gly Asp Net Phe Gly Xaa Gly Gly Leu Leu Phe Ile 1 10 15

Phe Phe Arg Ile Gly Cys Arg Phe Ser Arg Ile Gly 20

<210> 14

<211> 28

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<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 14

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Phe Ile 1 10 15 His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 20

<210> 15

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<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

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<400> 15

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Arg Ile 1 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 20

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<21.1> 27

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<213> Human HIV

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<222> (3)..(3)

<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

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<221> MISC_FEATURE <222> (10)..(10)
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<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 16

Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 20

<210> 17

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<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

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<222> (10)..(10)

<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 17

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Ser Leu Phe Ile 1 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 20

<210> 18

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<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine
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<223> X in the 3-position and X in the 10-position being amino acids
        such that one bears an acid group and the other bears an amine
<400> 18
Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Phe Ile 1 10 15 ^{\circ}
His Phe Lys Ile Gly Ser Arg His Ser Arg Ile Gly 20 25
<210> 19
<211> 28
<212> PRT
<213> Human HIV
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<222> (3)..(3)
<223> X in the 3-position and X in the 10-position being amino acids
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such that one bears an acid group and the other bears an amine

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<222> (19)..(19)

<223> NR representing an N-alkylarginine motif

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 <222> (10)..(10)
 <223> X in the 3-position and X in the 10-position being amino acids
        such that one bears an acid group and the other bears an amine
 <400> 19
 Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Phe Ile 1 10 15
 His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 20 25.
 <210> 20
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<223> X in the 3-position and X in the 10-position being amino acids
       such that one bears an acid group and the other bears an amine
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<223> X in the 3-position and X in the 10-position being amino acids
      such that one bears an acid group and the other bears an amine
<400> 20
Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Ser Arg
His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
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<210> 21
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<222> (3)..(3)

<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

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<222> (10)..(10)

<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

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Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Ser Ile 10 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 20 25

<210> 22

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<220>

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<222> (10)..(10)

<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

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<400> 22
Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Phe Arg
1 10 15
His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 20
<210> 23
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       PRT
<213> Human HIV
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<222> (3)..(3)
<223> X in the 3-position and X in the 10-position being amino acids
       such that one bears an acid group and the other bears an amine
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<222> (10)..(10)
<223> X in the 3-position and X in the 10-position being amino acids
       such that one bears an acid group and the other bears an amine
<400> 23
Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Phe Ila 1 5 10 15
His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
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      24
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<220>
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<222> (28)..(28)

<223> AMIDATION

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Gly Gly Cys Arg Ala Asp Met Phe Gly Cys Gly Gly Leu Leu Phe Ile 1 10 15 15  $^{\circ}$ 

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 20 25

<210> 25

<211> 28

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<223> AMIDATION

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<221> Disulfide

<222> (3)..(10)

<223>

<400> 25

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Phe Ile 1 10 10 15  $^{\circ}$ 

His Phe Ala Ile Gly Ser Arg His Ser Ala Ile Gly 20 25

<210> 26

<211> 27

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<213> Human HIV

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<222> (27)..(27)

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Arg Lys Lys Arg Arg Gln Arg Arg Gly Gly Leu Leu Phe Ile His 10

Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 20 25

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<211> 16

<23.2> PRT

<213> Human HIV

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Leu Leu Phe Ile His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly 10

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<222> (12)..(12)

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<400> 28

Gly Gly Cys arg Gly Asp Met Phe Gly Cys Gly Gly 1 .  $^{\circ}$ 

<210> 29

<211> 12

<212> PRT

<213> Human HIV

<220>

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<222> (12)..(12)

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<400> 29

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<210> 30

<211> 12

<212> PRT

<213> Human HIV

<220>

<221> Disulfide

<222> (3)..(10)

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<222> (12)..(12)

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<400> 30

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly 1  $10^{\circ}$